

**California Regional Water Quality Control Board
North Coast Region**

MONITORING AND REPORTING PROGRAM NO. 94-71
(Revised December 11, 2002)

FOR THE

CALIFORNIA DEPARTMENT OF CORRECTIONS
PELICAN BAY STATE PRISON

Del Norte County

SEWAGE TREATMENT PLANT MONITORING

The sampling devices currently in use at the Pelican Bay State Prison Sewage Treatment Plant are satisfactory for the composite samples required by this monitoring program. If composite sampling devices are not used, composite grab samples may be substituted. The sampling interval for composite grab samples shall be no more than 1 hour.

Influent Monitoring

Influent samples shall be collected at any point in the facility headworks at which all waste flowing into the plant is present and prior to any treatment. Samples of the influent waste shall be collected on the same day that samples for effluent analyses are collected and analyzed for the following:

<u>Constituent</u>	<u>Units</u>	<u>Sample Type</u>	<u>Frequency</u>
BOD ₅ (20°C, 5 day)	mg/l	8 hour composite	Twice Weekly
Suspended Solids	mg/l	8 hour composite	Twice Weekly
Flow (Mean and Peak)	mgd	Continuous	Continuous
Total Phosphorous	mg/l	8 hour composite	Monthly

Effluent Monitoring

Effluent samples shall be collected at any point following the Chlorine Contact Chamber and before discharge to the Rapid Infiltration Basins. Samples shall be analyzed for the following:

<u>Constituent</u>	<u>Units</u>	<u>Sample Type</u>	<u>Frequency</u>
Flow (Mean Daily)	mgd	Continuous	Continuous
BOD ₅ (20°C, 5 day)	mg/l	24 hour composite	Twice Weekly
Suspended Solids	mg/l	24 hour composite	Twice Weekly
Settleable Matter	ml/l	Grab	Weekly
Hydrogen Ion	pH	Grab	Daily
Chlorine Residual ¹	mg/l	Continuous	Daily
<u>Constituent</u>	<u>Units</u>	<u>Sample Type</u>	<u>Frequency</u>

¹Following dechlorination

Coliform	MPN/100 ml	Grab	Daily	Quarterly
Grease and Oil	mg/l		Grab	
Turbidity	NTU	Continuous	Continuous	
Nitrate Nitrogen	mg/l	24 hour composite	Once Weekly	
Total Phosphorus	mg/l	24 hour composite	Twice Weekly	
Chloride	mg/l	24 hour composite	Twice Weekly	
Halogenated Volatile				
Organics (EPA Method 601)	mg/l	Grab	Annually	
Arsenic	mg/l	24 hour composite	Annually	
Cadmium	mg/l	24 hour composite	Annually	
Copper	mg/l	24 hour composite	Annually	
Chromium (hexavalent)	mg/l	24 hour composite	Annually	
Lead	mg/l	24 hour composite	Annually	
Mercury	mg/l	24 hour composite	Annually	
Nickel	mg/l	24 hour composite	Annually	
Silver	mg/l	24 hour composite	Annually	
Zinc	mg/l	24 hour composite	Annually	
Cyanide	mg/l	24 hour composite	Annually	

Groundwater Monitoring

Samples shall be collected from the established network of groundwater monitoring wells which are representative of the upgradient and downgradient conditions of the sludge disposal area and rapid infiltration basins.

Groundwater samples taken from the sludge injection network shall be analyzed for the following:

<u>Constituent</u>	<u>Units</u>	<u>Sample Type</u>	<u>Frequency</u>
Total Dissolved Solids	mg/l	Grab	Quarterly
Nitrate Nitrogen	mg/l	Grab	Quarterly
Phosphate (Reactive)	mg/l	Grab	Quarterly
Chloride	mg/l	Grab	Quarterly

Groundwater samples taken from the RIB network shall be analyzed for the following:

<u>Constituent</u>	<u>Units</u>	<u>Sample Type</u>	<u>Frequency</u>
Nitrate Nitrogen	mg/l	Grab	Quarterly
Chloride	mg/l	Grab	Quarterly

Concurrent with the samples; observe, record, and analyze the variations in water levels within the monitoring wells. Smith River stage heights shall be determined whenever water levels are measured in the RIB wells. All water level measurements and stage heights shall be referenced to a common datum.

Solids Disposal

Annually, following the completion of sludge disposal for the year, the discharger shall provide a report to the Regional Water Quality Control Board (RWQCB) which shall, as a minimum, include the following:

- a. The quantity of sludge disposed (in dry tons and gallons).
- b. The quality of sludge disposed (i.e., well stabilized, odor free, metals and nitrogen concentrations)
- c. The specific location of the application site(s) where sludge was injected or spread.
- d. Analysis of the soil pH prior to sludge disposal.
- e. The amount of nitrogen (N) in pounds per acre.

A representative sample treated sludge shall be analyzed by EPA Method 6010 (ICAP SCAN) annually. The results shall be reported on a dry weight basis.

Analytical Methods

Suitable analytical methods are those specified in 40 CFR 136, and Standard Methods for the Examination of Water and Wastewater, 17th Edition, and the 40 CFR Part 503 sludge regulations unless otherwise stated. Any other protocols must be approved by the RWQCB prior to use.

All analytical data must be uncensored with the method detection limits identified. Only data from certified laboratories will be accepted.

Reporting

Monitoring reports shall be submitted to the RWQCB for each month on or before the 15th day of the following month. The annual summary report is due by January 31st of each year. The annual sludge report should be incorporated into the annual summary report.

Ordered By _____

Susan A. Warner
Executive Officer

December 27, 2002

(pelmon94revised 2002)